

REMARKS

This is responsive to the Office Action mailed September 17, 2009. Claims 20 and 21 are amended to provide antecedent basis for the “knife” recited therein.

Double Patenting

Claims 9, 20, 21 and 30 - 44 stand rejected on the ground of nonstatutory obviousness type double patenting as being unpatentable over claims 7 - 10 of U.S. Patent No. 6,757,952 in view of Bielagus et al., U.S. Patent No. 5,937,923 or Smith, U.S. Patent No. 6,662,837. The rejections are based on the following argument:

“The claims of the instant application recite most of the elements of the claim except for a wearshoe . . . [and since] Bielagus teaches a rotary cutter blade clamp having a wearshoe . . . [and] Smith teaches a wood chipper including a wearshoe . . . [, i]t would have been obvious . . . to incorporate a wearshoe . . . [in the claimed invention].”

Applicant continues to traverse the rejections on the grounds set forth below.

Claim 9

Claim 9 recites an apparatus in which knife assemblies are mounted to rings by the use of *shoulder bolts, wherein the shoulder bolts extend through holes in the rings such that shoulder portions of the shoulder bolts extend into the base.* Neither the '952 patent nor any of the references cited disclose shoulder bolts, or teach or suggest the use of shoulder bolts, and there is no evidence or argument of record showing the contrary.

Claim 20

Claim 20 recites an apparatus having a *cooperatively interlocking base and wearshoe, the interlocking feature providing for resistance to separation of these components along an axis defined by the bolt that mounts the wearshoe to the base*. Neither the '952 patent nor any of the references cited disclose, teach or suggest interlocking features capable of providing the claimed functionality, and there is no evidence or argument of record showing the contrary.

Claim 21

Claim 21 recites an apparatus having a base and wearshoe having *cooperatively ramping portions that are sloped, relative to the axis defined by the bolt that mounts the wearshoe to the base, in such a way as to resist sliding of the base relative to the wearshoe, away from the location at which the knife is mounted*. Neither the '952 patent nor any of the references cited disclose, teach or suggest ramping features capable of providing the claimed functionality, and there is no evidence or argument of record showing the contrary.

Section 102 Rejections

Claims 20 and 21 stand rejected under 35 U.S.C. §102(b) as being anticipated by Smith. It is alleged, with regard to claim 20, that Smith teaches a knife assembly including a knife 23 clamped via a bolt 25 between an upper clamp surface 13 (part of "clamp plate 10") and a "wearshoe" 2a (part of "blade mount base 2"); and that these components have cooperatively interlocking portions. Apparently, it is being alleged that the "blade mount base 2" corresponds to the claimed wearshoe and the "clamp plate 10" corresponds to the claimed base. It is further

alleged, with regard to claim 21, that Smith teaches cooperatively ramping portions that are sloped relative to an axis as seen in Figure 2.

Applicant disagrees that the “blade mount base 2” of Smith corresponds to the claimed wearshoe, but it is not necessary to reach that issue. Both claims 20 and 21 recite three separate components: a wearshoe, a base, and an upper clamping member. Assuming for sake of argument that Smith’s blade mount base 2 corresponds to the claimed wearshoe as alleged, and Smith’s clamp plate 10 corresponds to the claimed base as alleged, *there is no remaining third component in Smith to correspond to the claimed upper clamping member.* Smith cannot anticipate claim 20 or 21 without having all the claim elements.

Moreover, claims 20 and 21 recite functional requirements for the respective “cooperatively interlocking portions” and “cooperatively ramping portions” that Smith also fails to meet. With respect to claim 20, the parts in Smith that have been identified as “interlocking” are incapable of providing the functionality expressly required in claim 20 (noted above in connection with the double patenting rejection of the same claim); i.e., it is apparent by inspection of any of Figures 1, and 3 - 6 of Smith that there are no features of either the “clamp member 10” or the “base plate 2” that could possibly provide any resistance to separating these parts along the axis of the bolt 25. And with respect to claim 21, the parts in Smith that have been identified as “ramping” are incapable of providing the functionality expressly required in claim 21 (also noted above in connection with the double patenting rejection of the same claim); i.e., it is apparent by inspection of Figure 2 of Smith that the portions that are sloped do not even make physical contact with one another, and they do not make physical contact with any other structures either. Accordingly, they do not come close to meeting the claim requirement for the

“cooperative” functionality that is claimed, to resist sliding of one of the elements relative to the other.

Claim 20 is also rejected under 35 U.S.C. §102(b) as being anticipated by Loth, U.S. Patent No. 6,561,885. The Examiner has repeated the argument that was made in the prior Office Action, and Applicant has already fully responded to this argument. Loth, just like Smith above, is incapable of providing the claimed functionality. Loth is closer to the claimed invention than Smith (because Loth is at least a ring slicer), however, it is readily apparent by inspection of Figure 2 of Loth that the parts that would correspond to the claimed wearshoe and base are not interlockingly related in the specific manner expressly required by the claim, which is to resist separation along the axis of the bolt that draws these two parts together.¹

Section 103 Rejections

Claim 21 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Smith. The Office Action states that it would have been obvious to add cooperatively ramping portions to Smith “for the purpose of firmly securing the knife.”

Applicant respectfully traverses the rejection because the argument is a mere assertion. First, it is merely assumed that a person of ordinary skill would have perceived a need to more firmly secure the knife in Smith. No evidentiary or judicial basis has been presented to support this assumption. It is a highly questionable assumption because the knife in Smith is already

¹ Note there are three bolts shown in Figure 2, but only one is shown that corresponds to the bolt recited in the claim, i.e., that which is adjacent the leader line for the reference designator 1.6 (compare Figure 2 of Loth with bolt Figure 7, bolt 45b of the present application).

secured, and there is no indication in Smith, or in any of the other art of record, that it is not already firmly secured, or that a need would have been recognized to more firmly secure it.

Moreover, even if there was such a recognition of a problem, the allegation merely assumes that the skilled person would have recognized that cooperatively ramping portions would solve it. No evidentiary or judicial basis has been provided for this assumption either. As pointed out above in connection with the rejections for anticipation based on Loth and Smith, the Office Action fails to identify any prior art disclosing cooperatively ramping portions as claimed. *Therefore, the skilled person would have needed to invent these features, not merely select them from an existing store of public knowledge as would be the minimum requirement for obviousness.*

Claims 30 - 34 and 37 - 42 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Smith. The allegation is based on the same set of assumptions shown immediately above to be insufficient to support the rejection of the base claim 21, and so it is respectfully submitted that there is no need to reach the issue of whether and to what extent claims 30 - 34 and 37 - 42 provide for additional patentability.

Claims 9 and 44 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Loth or Nettles, U.S. Patent No. 5,348,064 in view of Schneider, U.S. Patent No. 5,983,769 or Gotham, U.S. Patent No. 4,000,460. It is acknowledged, with appreciation, that Loth and Nettles fail to teach the shoulder bolt aspect of the claims. However, it is asserted that Schneider and Gotham demonstrate that it was well known to use “a threaded bolt” for securing a knife to a cutting device, and while that observation is no doubt true, it is not relevant to the

claims. The claims require a “shoulder bolt,” not a “threaded bolt,” and neither Schneider nor Gotham disclose shoulder bolts.

Second, the claimed shoulder bolts are not claimed for use in “securing a knife to a cutting device;” rather, they are expressly claimed for securing a knife assembly to the rings of a ring slicer.

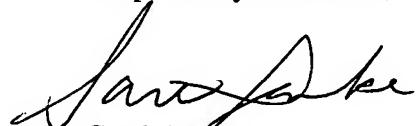
Claim 35 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Smith, because “it has been held that constructing a formerly integral structure in various elements involves only routine skill” However, since claim 35 does not relate to “constructing a formerly integral structure in various elements,” it is assumed that the Examiner has asserted this rationale by mistake, and intended to cite law pertinent to the obviousness of ranges.

It should be then be noted that there is a critical difference between an angle that provides for resistance as claimed, and angles such as those in Smith that do not. Smith does not recognize the objective of providing for a resistance as claimed in the first place, and the MPEP explains that ranges are not to be considered obvious where the variable being optimized was not recognized in the art as being “result effective.” See MPEP 2144.05(II)(B).

Claims 36 and 43 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Smith in view of Loth as applied to claim 20, and further in view of Nettles (claim 36), or Smith in view of Nettles (claim 43). It is respectfully submitted that the rejections are rendered moot by Applicant’s showing above that claim 20 has not been shown to be unpatentable over Smith in view of Loth as alleged. In addition, it should be noted that Nettles does not have a cantilevered upper clamping portion.

For all of the foregoing reasons, it is respectfully submitted that the claims remaining in the application are in condition for allowance, and therefore the Examiner is respectfully requested to pass this case to issue.

Respectfully submitted,



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